

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: APR 07 1989

SUBJECT: Health and Safety Plan Review  
American Chemical Services Inc., Griffith Indiana

FROM: Robert K. Jones *[Signature]*  
Technical Support Unit

TO: Robert Swale, RPM  
IL/IN, Unit 2

I have reviewed the subject H&S plan and I have the following comments:

Recommend that a statement at the beginning of the H&S plan be added saying that all of the operations at the site will comply with the requirements of the Hazardous Waste Operations and Emergency Response Standard, OSHA 29 CFR 1910.120 and with all of the applicable subparts of the OSHA Construction and General Industry Standards, 29 CFR 1926 and 29 CFR 1910, respectively. Subpart C, - General Safety and Health Provisions, Subpart D, - Occupational Health and Environmental Controls, Subpart E - Personal Protective and Life Saving Equipment, Subpart F - Fire Protection and Prevention, Subpart G - Signs, Signals and Barricades, Subpart I - Tools - Hand Power, Subpart K - Electrical, Subpart L - Ladders and Scaffolding Subpart O - Motor Vehicles, Mechanized Equipment and Marine Operations and Subpart P - Excavations Trenching and Shoring of the OSHA Construction Standards are applicable to the majority of all site operations. Additional OSHA Construction and General Industry Standards may be appropriate depending on the nature of the operations being conducted at site. Additional OSHA standards are cited later in this H&S plan review.

Two of the compounds listed in Table 5 have incorrect PELS/TLVs. The PEL for Benzene is 1 PPM and the PEL for Vinyl Chloride is 1 PPM. Both of these compounds have OSHA expanded standards which must be complied with. The expanded standards contain additional requirements other than the Time Weighted Average (TWA). A dermal toxicity for Phenol should also be included on this table. The OSHA expanded standards for Benzene and Vinyl Chloride are 29 CFR 1910.1028 and 29 CFR 1910.1017 respectively.

There should be a notation in the H&S plan that Hexavalent Chromium has a TLV of  $.05\text{mg}/\text{m}^3$  and that certain Chromium VI compounds are carcinogenic. All compounds which are carcinogenic or have carcinogenic potential at the site should have that information listed in the site H&S plan. Danger and caution signs and barricades should be erected as necessary. The configuration of the signs must be in accordance with 29 CFR 1926 Subpart G previously mentioned.

The H&S plan mentions that eye wash units will be at the site near the command post. Approved eye wash units or drench hoses should be deployed at the site close to the source of the hazard. The ANSI requirement is no more than 100 feet nor longer than 10 seconds travel time from the source of the hazard. OSHA 29 CFR 1910.151 states that the eye wash or drench hose must be provided within the work area.

Standard Operating Procedures (SOPS) must be in the H&S plan. Some of the common SOPS are:

- No eating, chewing gum or tobacco or smoking without first washing hands and face.
- No smoking, eating, drinking outside of the support (clean) zone.
- Do not sit, lean on drums or other contaminated material.
- Do not bring contaminated clothing or equipment into the support zone.
- The buddy system should be employed for hazardous waste site work.

The H&S plan must contain a written respiratory protection program for the selection use and maintenance of the respirators which will be used at the site. The written program must be in accordance with OSHA 29 CFR 1910.134.

All workers at the site who wear negative pressure respirators must have been fit tested with the make, style and size of respirator they will be wearing. Fit testing is required at least annually.

Air monitoring frequency should be listed in the plan. Test pits and soil boring and other operations where the probability exists that air borne concentrations of toxic substances will be elevated may have to be monitored continually. When

different locations on the site are involved, or the type of operations changes, additional monitoring must be done. The plan states that an HNU PID and other instruments may be used. The type of monitoring equipment which will be used must be listed together with the calibration procedures and frequency.

As part of the site control, a sign-in, sign-out log must be maintained so that all persons (visitors and workers) on the site can be accounted for. Depending on weather, and other conditions, a log of workers in the exclusion zone may also be required.

If heavy PBC or oil/grease contamination is encountered, Saran coated (Saranex) Tyveks offer superior protection over polyethylene Tyvek.

The neoprene outer gloves listed in the plan are acceptable for PCBs but unsuitable for Phenol. Viton gloves, although very expensive are suitable for both compounds. Nevertheless, chemical protection clothing should be chosen to protect against the substance encountered.

Back-up safety rescue persons and SCBAS must be in stand-by positions when SCBAS are being worn by the work crew. It goes without saying that SCBA personnel would work in pairs, because of the possibility of HCN generation this is an important aspect of the HCN emergency procedures.

Drilling rig workers must wear hard hats, safety shoes and eye protection (glasses/goggles) whether or not conditions require a splash shield.

The plan states that test pits will be dug at the site. Will workers be entering the test pits? It is recommended that workers do not enter. However, if entry is made and the pit is 5 feet or more deep, the sloping/shoring and other requirements of OSHA 1926 Subpart P will have to be met.

A specific signal for site evacuation should be adopted and all workers/visitors told what it is. It should be listed in the H&S plan.

Wind direction indicators should be erected that are visible to site workers and to emergency workers from outside the site if an incident warrants their presence. Plastic tape or ribbon will satisfy this requirement if a complete weather station is not to be erected.